UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/888,340	06/22/2001	Michael Neal	DEM1P007	7213

36088	7590	07/06/2005	EXAMINER

KANG LIM
3494 CAMINO TASSAJARA ROAD #436
DANVILLE, CA 94306

ROBINSON BOYCE, AKIBA K

ART UNIT	PAPER NUMBER
3639	

DATE MAILED: 07/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 June 2001*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *5/31/05, 2/7/05*.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____ .

U.S. Patent and Trademark Office

PTOL-326 (Rev. 1-04)   Office Action Summary   Part of Paper No./Mail Date 062305

EA

Information disclosure statement(s) continued:
11/5/04,10/26/04,9/14/04,7/12/04,2/17/04,9/30/03,9/2/03,7/16/02,9/7/01,8/6/01

DETAILED ACTION

Status of Claims

1.   Due to communications filed 6/22/01, the following is a non-final first office

action. Claims 1-20 are pending in this application and have been examined on the

merits. Claims 1-20 are rejected as follows.

Claim Rejections - 35 USC § 112

2.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

3.   Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention.

    In claims 1, and 11, the preambles recite "computing a preferred set of prices".

However, this term is a relative term that render the claims indefinite since the body of

the claims do not actually compute prices, but merely relaxes a lower priority rule to

allow a higher priority rule to become feasible. Because the term "computing a

preferred set of prices" is used, both claims and the scope of the invention is unclear.

All claims that depend from claim 1 (claims 2-10), and claim 11 (claims 12-20) are

rendered as indefinite as well.

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5.   Claims 1, 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Damian et al (US 5,212,791).

As per claims 1, 11, Damian et al discloses:

computer readable code for storing a plurality of rules/storing a plurality of rules, (col. 107, lines 37-42, shows memory for string the set of rules, w/ col. 9, lines 63-64, shows hard coded rules applied);

computer readable code for allowing the prioritization of the plurality

of rules/ allowing the prioritization of the plurality

of rules, (col. 10, line 5, line 15, lines 40-41, shows low, medium and high priority rules respectively); and

computer readable code for relaxing at least one lower priority rule to

allow a higher priority rule to become feasible/ relaxing at least one lower priority

rule to allow a higher priority rule to become feasible, (Col. 5, lines 30-34, attaining feasible schedules, w/ col. 108, lines 37-46, lowering error counts [medium rules] to alter disposition rules [high priority rules] thereby relaxing rules to make schedule more feasible).

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the
invention was made to a person having ordinary skill in the art to which said subject matter pertains.
Patentability shall not be negatived by the manner in which the invention was made.

7.   Claims 2-4,10, 12, 13, 19, 20 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Damian et al (5,212,791) as applied to claim1 above, and further in

view of Ouimet et al, (US 6,094,641).

As per claims 2, 12, Damian et al fails to disclose the following, but does disclose

a production scheduling system that implements dynamic scheduling for products in the

abstract, lines 1-5.

However, Ouimet et al discloses:

an econometric engine for modeling sales as a function of price to create a sales

model/creating a sales model, (Col. 4, lines 35-44, [demand model gives predicted

sales of an item based on price]);

a financial model engine for modeling costs to create a cost model/creating a

cost model, wherein the generating a preferred set of prices uses information from the

creation of the sales model and the creation of the cost model, (col. 4, lines 52-53,

[pricing model], which includes an activity-based costing module, Col. 2, lines 1-12,

including visibility, and taking the promotional cost into account when modifying the

demand model, in this case, the module is inherent with Ouimet since Ouimet's system

is computer-implemented and in order to create models, a module is necessary in a

computerized system); and

wherein the optimization engine is coupled to the econometric engine and

financial model engine to receive input from the econometric engine and financial model

engine, wherein the optimization engine generates the preferred set of prices, (Col. 5,

lines 45-48, [using fitted, modified demand model to determine price that will maximize

profits, {optimization}]).

Ouimet et al discloses this limitation in analogous art for the purpose of showing

how products can be implemented in models.

It would have been obvious to one of ordinary skill in the art at the time of the

applicant's invention to implement an econometric engine, a financial model engine and

an optimization engine with the motivation of ultimately optimizing prices.

As per claim 3, Damian et al discloses:

further comprising a support tool for allowing a user to set a plurality of rules and

for prioritizing the plurality of rules, (col. 2, lines 29-31, interference engine).

As per claims 4, 10, 13, 19, Damian et al discloses:

computer readable code for determining a priority of a rule determined to be

infeasible/ determining a priority of a rule determined to be infeasible,/determining the

lowest priority infeasible rule (Col. 5, lines 46-47, using computer scheduler to

determine when no feasible outcome is available, col. 6, lines 21-31, shows lowest

leveling hierarchy maintains the up-to-date status of each production resource, w/ col.

108, lines 21-24, shows process is repeated to find feasible outcome, therefore the

lowest level in the hierarch is repeatedly used to find feasible outcome);

computer readable code for determining if at least one rule with a lower priority

than the priority of the rule determined to be infeasible may be relaxed to allow the rule

determined to be infeasible to become feasible; and computer readable code for

relaxing at least one rule with a lower priority than the priority of the rule determined to

be infeasible to allow the rule determined to be infeasible to become feasible/

determining if at least one rule with a lower priority than the priority of the rule

determined to be infeasible/lowest priority infeasible rule may be relaxed to allow the

rule determined to be infeasible to become feasible; relaxing at least one rule with a

lower priority than the priority of the rule determined to be infeasible/lowest priority

infeasible rule to allow the rule determined to be infeasible to become feasible, (col. 5,

lines 47-48, easing constraints until acceptable outcome is obtained).

8.   Claims 5-9, and 14-18 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Damian et al (5,212,791) as applied to claim1 above, and further in

view of Ouimet et al, (US 6,094,641), and further in view of Ouimet et al (6,308,162).

As per claims 5, 14, neither Damian et al nor Ouimet et al '641disclose wherein

at least one of the plurality of rules is a gross margin rule, which defines a constraint on

the change of gross margin, but Damian et al does disclose a production scheduling

system that implements dynamic scheduling for products in the abstract, lines 1-5.

However, Ouimet et al '162 discloses:

wherein at least one of the plurality of rules is a gross margin rule, which defines

a constraint on the change of gross margin, (col. 4, lines 5-10, use of enterprise model

to show increase in gross margin, w/ Col. 9, lines 21-27, shows scenario analysis

routine implemented with the gross margin). Ouimet et al '162 discloses this limitation

in an analogous art for the purpose of showing how the gross margin is implemented in

the optimization of enterprise planning models.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention for a rule to be a gross margin rule with the motivation of ultimately having a definition of rules in a gross marginal situation.

As per claims 6, 15, neither Damian et al nor Ouimet et al '641 disclose wherein the constraint on change of the gross margin is placed on each product of a group of products, but Damian et al does disclose a production scheduling system that implements dynamic scheduling for products in the abstract, lines 1-5.

However, Ouimet et al '162 discloses:

wherein the constraint on change of the gross margin is placed on each product of a group of products, (col. 4, lines 22-23, shows use of models to price products). Ouimet et al '162 discloses this limitation in an analogous art for the purpose of showing that price is implemented into the equation for determining gross margin.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention for the constraint on change of the gross margin to be placed on each product of a group of products with the motivation of ensuring that each product will stay in a specific price range that will allow the gross margin to be achieved.

As per claims 7, 16, neither Damian et al nor Ouimet et al '641 disclose wherein the constraint on change of the gross margin is placed on an average gross margin of a group of products, but Damian et al does disclose a production scheduling system that implements dynamic scheduling for products in the abstract, lines 1-5.

However, Ouimet et al '162 discloses:

wherein the constraint on change of the gross margin is placed on an average

gross margin of a group of products, (col. 13, lines 29-41, where the auxiliary goal

[finding gross margin] is represented by the average price, see col. 9, lines 24-26).

Ouimet et al '162 discloses this limitation in an analogous art for the purpose of showing

how the gross margin is implemented in the optimization of enterprise planning models.

It would have been obvious to one of ordinary skill in the art at the time of the

applicant's invention for the constraint on change of the gross margin to be placed on

an average gross margin of a group of products with the motivation of ensuring that

each product will stay in a specific price range that will allow an average gross margin to

be achieved.

As per claims 8, 17, neither Damian et al nor Ouimet et al '641disclose wherein

at least one of the plurality of rules is a store level volume rule, which defines a

constraint on the change of volume of sales at a store level, but Damian et al does

disclose a production scheduling system that implements dynamic scheduling for

products in the abstract, lines 1-5.

However, Ouimet et al '162 discloses:

wherein at least one of the plurality of rules is a store level volume rule, which

defines a constraint on the change of volume of sales at a store level, (col. 5, lines 43-

64, total amount of sales). Ouimet et al '162 discloses this limitation in an analogous art

for the purpose of showing that the total amount of sales is implemented in the

optimization of enterprise planning models.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention for at least one of the plurality of rules to be a store level volume rule, which defines a constraint on the change of volume of sales at a store level with the motivation of ensuring that each product will stay at a specific volume that will allow a gross margin to be achieved.

As per claims 9, 18, neither Damian et al nor Ouimet et al '641 disclose wherein at least one of the plurality of rules is a competition rule, which provides a constraint on the difference between at least one competitor's prices, but Damian et al does disclose a production scheduling system that implements dynamic scheduling for products in the abstract, lines 1-5.

However, Ouimet et al '162 discloses:

wherein at least one of the plurality of rules is a competition rule, which provides a constraint on the difference between at least one competitor's prices, (col. 10, lines 34-39, using competitive data to find price image). Ouimet et al '162 discloses this limitation in an analogous art for the purpose of showing that competitor's prices are implemented in the optimization of enterprise planning models.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention for at least one of the plurality of rules to be a competition rule, which provides a constraint on the difference between at least one competitor's prices with the motivation of ensuring that each product will stay at a specific price lower than competitor's prices so a gross margin can be achieved.
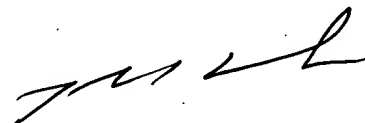
Conclusion

9.   Any inquiry concerning this communication or earlier communications from the
examiner should be directed to Akiba K Robinson-Boyce whose telephone number is
571-272-6734. The examiner can normally be reached on Monday-Tuesday 8:30am-
5pm, and Wednesday, 8:30 am-12:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, John Hayes can be reached on 571-272-6708. The fax phone numbers for
the organization where this application or proceeding is assigned are 703-746-7238
[After final communications, labeled "Box AF"], 703-746-7239 [Official Communications],
and 703-746-7150 [Informal/Draft Communications, labeled "PROPOSED" or "DRAFT"].

Any inquiry of a general nature or relating to the status of this application or
proceeding should be directed to the receptionist whose telephone number is 703-305-
3900.

A. R. B.
June 23, 2005

JOHN G. WEISS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600